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MARSIPASTER ACICULA, NEW SPECIES (ASTEROIDEA: ECHINODERMATA), FROM THE CARIBBEAN AND GULF OF MEXICO

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Among the starfishes collected by the Texas A&M University's R/V "Alaminos" in the western Gulf of Mexico was a small specimen of the genus Marsipaster, in very poor, fragmentary condition. Comparison with material in the U.S. National Museum showed it to be the same species as specimens catalogued and labeled, in A. E. Verrill's own hand, as Pteraster acicula. As far as I have been able to determine, this species was never described. Verrill's specimens were collected by the "Albatross" in 1885, one off Havana, Cuba, and two off the west coast of Florida, in 217 and 142 fathoms. He apparently overlooked them when preparing his 1915 report on the starfishes of this area. The "Alaminos" specimen was from 25°31'N, 95°91'W, 580–750 fathoms.

Marsipaster acicula new species

Arm short, disc plump, inflated. Supradorsal membrane very fragile, delicate, web like. Abactinal plates 4-lobed, paxillar columns tall, moderately stout; 8–25 long, slender, glassy spines crown each paxilla, longer than paxillar column and protruding through supradorsal membrane for as much as half their length; paxillar spines webbed together on each paxilla near their bases below supradorsal membrane. Central osculum not conspicuous, closed not by separate and distinct valves but by the irregular number of spines of adjacent paxillae webbed together in a continuous ring around the osculum. Spiraculae small, numerous.

Each half of jaw plate bears 5 oral spines; a single large epioral spine on each jaw plate, stout, smoothly tapering, glassy. Six erect adambulacral spines, plus a recumbent actinolateral spine which is very long,

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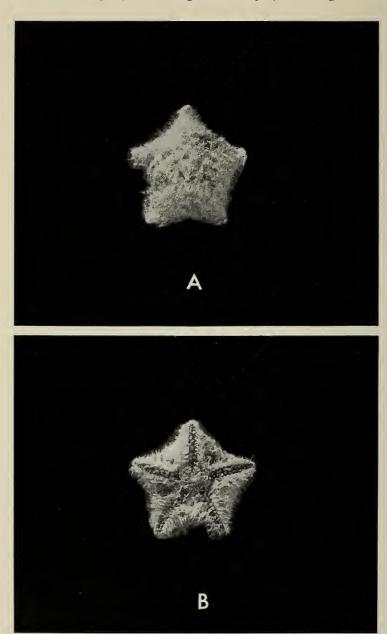


Fig. 1. Marsipaster acicula new species. A. Dorsal, B. Ventral.

slender, immersed in actinal membrane; adambulacral spines in curved series, innermost one small, very slender; others rather long, slender, acute, subequal. No actinolateral fringe.

R = 8 mm, r = 5 mm (in largest paratype). Rr = 1:1.6.

Holotype: USNM 18416, from "Albatross" station 2642.

Paratypes (2): USNM 10447, from "Albatross" station 2401.

Discussion: This species is very similar to another Caribbean form, Pteraster caribbaeus Perrier, 1881, in size and general facies, but it differs in lacking a marginal fringe, in having many more paxillar spines (8-25 vs. 8-10 for P. caribbaeus), and in having a smoothly tapered epioral spine, in contrast to the flattened, sublanceolate epioral spine of P. caribbaeus. The jaws are also broader and flatter, with 5 oral spines, not particularly slender; P. caribbaeus has 6 very slender oral spines on each jaw half. The supradorsal membrane is much more delicate and resembles spongin, rather than being a continuous sheet; there are, of course, no muscle bands. This is the first species of Marsipaster from the Atlantic. It differs from the Pacific species mainly in the armature of the mouth plates. Sladen (1889) lists 3 species of Marsipaster, one from the Atlantic. However, this species, M. alveolatus Perrier, is an undoubted Pteraster. Marsipaster spinosissimus Sladen, 1882, is from the mid-South Pacific; it differs from M. acicula in having 3 webbed oral spines and the epioral spine is replaced by a very small spine webbed to the oral spines. M. hirsutus Sladen, 1882, from the west coast of South America, has mouth armature similar to that of M. spinosissimus, but the oral spines are much longer and set back from the edge of the mouth plate, rather than being terminal on it.

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